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REVIEW OF LITERATURE

NEED/IMPORTANCE OF THE STUDY

STATEMENT OF THE PROBLEM

**OBJECTIVES** 

**HYPOTHESIS (ES)** 

RESEARCH METHODOLOGY

**RESULTS & DISCUSSION** 

**FINDINGS** 

**RECOMMENDATIONS/SUGGESTIONS** 

CONCLUSIONS

LIMITATIONS

SCOPE FOR FURTHER RESEARCH

REFERENCES

APPENDIX/ANNEXURE

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• Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

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• Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

### CONFERENCE PAPERS

• Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–23

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# INFRASTRUCTURE MANAGEMENT IN IT PARKS WITH SPECIAL REFERENCE TO TECHNOPARK, TRIVANDRUM

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#### **ABSTRACT**

Infrastructure is the baseline and key driver for overall development of a country. It is an admitted fact that the level of economic development of a country directly depends on the development of infrastructure. To sustain this economic growth there must be a matching infrastructure. Poor infrastructure causes higher supply costs and delays for businesses. Technopark's aim is to create infrastructure and provide support required for the development of high-technology companies. Renowned as the Country's first IT Park and one of the largest one in India in terms of built up space, Technopark was reputed as greenest IT Park established in 1990. It aims to provide all the infrastructure and support facilities needed for IT/ITES. The study was conceived to analyze how Technopark, Trivandrum, supports the IT companies functioning in Technopark, in retaining its operational viability by providing continuous and world class infrastructure. The data for the study were collected from both primary and secondary sources. Statistical tools such as Chi-square test, Fried Mans Rank Test, correlation one way Anova were used to verify the hypothesis.

### **KEYWORDS**

IT parks, infrastructure management, technopark, Trivandrum.

### INTRODUCTION

Infrastructure is baseline and key driver for overall development of any region and in countries like India, one of the fastest growing economies today; it plays a key role in wealth creation process in the industrial set up. It is an admitted fact that the level of economic development of a country directly depends on the development of infrastructure. To sustain this economic growth there must be a matching infrastructure. The presence of sufficient infrastructure will require for achievement of income surpluses by the body corporate. Though Infrastructure has always been a part of mankind, the difference now is that Information Technology provides new vistas of innovation and growth. Infrastructure refers to structures, systems, and facilities serving a country, city, or area, including the services and facilities necessary for its economy to function. It typically characterizes technical structures such as roads bridges, tunnels, water supply, telecommunications, and so forth, and can be defined as "the physical components of interrelated systems providing commodities and services essential to enable, sustain, or enhance societal living condition. Poor infrastructure causes higher supply costs and delays for businesses.

In July 1990, the Government of Kerala conceptualized Technopark as a facility to foster the development of high-technology industries in the state. Renowned as the Country's first IT Park and one of the largest one in India in terms of built up space, Technopark was reputed as greenest IT Park established in 1990. Technopark houses about 290 companies with more than 40,000 professionals. It is an autonomous society promoted by the Government of Kerala.

Technopark's aim is to create infrastructure and provide support required for the development of high-technology companies. Technopark aims to provide all the infrastructure and support facilities needed for IT/ITES and electronics companies to function. In addition to built-up office space, it also provides all utilities as well as the data connectivity

### **NEED FOR THE STUDY**

Poor infrastructure impedes a nation's economic growth and international competitiveness (The World Bank 2006). Insufficient infrastructure also represents a major cause of loss of quality of life, illness and death (Willoughby 2004) Infrastructure has to provide basic needs and facilities to the population and support in achieving higher growth rates. The present paper provides how infrastructure plays a role to fulfill their growth targets as well as achieving higher living standards of the employee of Technopark.

### STATEMENT OF THE PROBLEM

Technopark aims to provide all the infrastructure and support facilities needed for IT/ITES and electronics companies to function. The study was conceived to analyse how Technopark, Trivandrum, supports the IT companies functioning in Technopark, in retaining its operational viability by providing continuous and world class infrastructure

### **OBJECTIVE**

The main objective of the study is to understand the Infrastructure Management Practices in Technopark, Kerala

### RESEARCH METHODOLOGY

The data for the study were collected from both primary and secondary sources. The response of personnel in the IT industrial units of Technopark act as the base for primary data. Apart from it a variety of sources like official government publications and reports, study reports of government agencies, industry surveys and reports, research theses and articles, books and periodicals, seminar reports, working papers, study reports of expert committees, news papers, magazine articles and web sites were also referred for obtaining secondary data.

### SAMPLING DESIGN

The sample for the study consists of employees and top level executives serving in different companies hosted by Technopark. The companies are selected irrespective of its size and volume of business. During the study period, there are 289 companies with a workforce of about 46000. Out of this, 300 employees

represent the population of the study, which was randomly selected, and 29 companies, which formed 10 percent of companies mentioned, were selected for top level executive study.

#### STATISTICAL TOOLS USED

Statistical tools such as Chi-square test, Fried Mans Rank Test, correlation one way Anova were used to analyze the data.

#### **ANALYSIS**

#### **HYPOTHESIS I**

Null Hypothesis: There is no significant relationship between employee satisfaction on the facilities and the positions level.

TABLE 1: ANOVA FOR SIGNIFICANT RELATIONSHIP BETWEEN EMPLOYEE SATISFACTION ON THE FACILITIES AND THE POSITIONS LEVEL

Variables	Source of Variation	Sum of squares	DF	Mean square	F	Sig
Hospital &Health care system	Between Groups	1.709	2	.855	3.565	.030
	Within Groups	71.207	297	.240		
	Total	72.917	299			
Educational institutions	Between Groups	1.631	2	.816	6.050	.003
	Within Groups	40.035	297	.135		
	Total	41.667	299			
Cafeteria& restaurants	Between Groups	2.671	2	1.336	6.575	.002
	Within Groups	60.329	297	.203		
	Total	63.000	299			
	Between Groups	1.718	2	.859	3.534	.029
Bank/ATM	Within Groups	72.202	297	.243		
	Total	73.920	299			
Conference hall & Training centre	Between Groups	.757	2	.378	1.602	.0023
	Within Groups	70.160	297	.236		
	Total	70.917	299			

Source: Authors Compilation

To the test significant relationship between employee satisfaction on the facilities and the position level, one way ANOVA test has been applied. The result of ANOVA shows that for Hospital &Health care system p=0.030, foe educational institutions p= 0.003, for Cafeteria& restaurants p=0.002, for bank/ATM=0.029 and for Conference hall & Training centre p=0.0023. The p values are lesser than 0.05 significance level. Thus the null hypothesis is rejected and it is clear that there is significant relationship between the employee satisfaction on the facilities and the position level of employee.

HYPOTHESIS 2

Null Hypothesis: There is no significant relationship between the number of employees in the organisation ion and the number of floors in the building. To test this hypothesis Pearson Product Moment Correlation (PPMC) between the number of employees and the number of floors in the building was applied.

TABLE 2: CORRELATION OF NUMBER OF EMPLOYEES AND NUMBER OF FLOORS

Employees	Floor
Pearson correlation	0.014
Sig (2 tailed)	0.611
N	29

Source: Authors Compilation

Table 2 shows that the "p value" 0.014 is lesser than 0.05 level significance so the all hypothesis is rejected it is also clear that there is significant relationship between the number of employees in the organization and the number of floors in the building In order to confirm the above result chi square test has been conducted.

CHI SQUARE TEST to verify that there is significant relationship between the number of employees in the organization and the number of floors in the building

TABLE 3

	INDLE		
	Value	DF	Assuming (2 tailed)
Pearson chi square	13.569	9	0.041
likelihood ratio	14.966	9	0.092
linear by linear association	0.272	1	0.602
N of valid cases	29		

Source: Authors Compilation

A. 15 cells 983.8 % have expected count less than 5 the minimum expected count is 0.31 table 2 shows that p value 0.014 is lesser than the 0.05 level of significance so the null hypothesis is rejected it is also clear that there is significant relationship between the number of employees in the organization and the number of floors in the building

### **HYPOTHESIS 3**

Null Hypothesis: There is no significant relationship between the types of the company and the infrastructure facilities in their company.

To test this hypothesis a pearson product moment correlation (PMMC) between the type of the company and the facilities in the company was applied.

TABLE 4: CORRELATION OF TYPE OF COMPANY AND THE INFRASTRUCTURE FACILITIES

TYPES OF COMPANY	INFRASTRUCTURE FACITIES
Pearson s correlation	0.785
Sig (2 tailed)	0.060
N	29

Source: Authors Compilation

**Table 4** says that the correlation co efficient between the type of company and infrastructure facilities in the company is 0.785 it is positively correlated and it is clear that there is significant relationship between the type of company and the infrastructure facilities in the company In order to confirm the above result the chi square test has been conducted.

TABLE 5: FRIED MANS RANK TEST FOR THE LEVEL OF SATISFACTION OF EMPLOYEES ON THE FACILITIES AVAILABLE IN THE BUILDING

Particulars	Mean Rank	Rank
Provision for natural light & air	4.37	8
Wide corridors, verandas& passage ways	4.59	4
Convenient staircases	4.41	6
Adequate number of emergency exists	4.61	2
Adequate recreational space	4.39	7
Fire escape staircases	4.62	1
Water closet	4.42	5
Lift to carry stretcher	4.60	3

Source: Authors Compilation

To test the level of satisfaction of employees on the facilities available in the building fired mans rank test has been conducted the test result depicts that the first and second ranks has been taken up by the highest mean values 4.62 and 4.61which are possessed by the variables Fire escape staircases and Adequate number of emergency exists. The third and fourth ranks are occupied by Lift to carry stretcher and Wide corridors, verandas& passage ways 4.60 and 4.59. The fifth and sixth ranks are taken up by Water closet and convenient staircases are is 4.42 and 4.41. Finally the seventh and eight ranks are adequate recreational space and Provision for natural light & air which has their mean ranks of 4.39 and 4.37 respectively. It is also clear form the mean values that all the facilities provided re sound since it does not have high level of variation between the mean values.

TABLE 6: FRIED MANS RANK TEST FOR THE PROVISIONS AVAILABLE TO DISABLED PERSONS

Particulars	Mean Rank	Rank
Easy access to main entrance through ramp	4.80	1
Ramp is provided with hand rail	4.59	2
Slope of all ramps are constant with in a building	3.71	3
Building exceeds 1000 sq m have lift	1.94	6
Provisions of a washbasin at an accessible location	3.51	4
Water closet at the ground floor and every floor in multiples of three	2.46	5

Source: Authors Compilation

To test the employees satisfaction on the provision available to disabled persons, Fried mans rank test has been conducted. The test results exhibits that the first two ranks were occupied by easy access to main entrance through ramp and ramp is provided with handrail, since their mean ranks are 4.08 and 4.59. The third and fourth ranks has been occupied by slope of all ramps are constant with in a building and provisions of a washbasin at an accessible location, whose mean ranks are 3.71 and 3.51 respectively. The last two ranks are taken by the least mean values 2.46 and 1.94 which are possessed by water closet at the ground floor and every floor in multiples of three and Building exceeds 1000 sq m have lift respectively.

### **FINDINGS**

- Among the total number of 300 employees in the techno park 46% of the respondents belongs to the age group of 25 to 35 years and 29% belongs to the age group of 35 to 45 years
- Out of the 300 samples 68 % are male and the remaining 32 % are female. Most of the respondents had bachelor's degree in various disciple. 30.3 % were computer graduates, 29.7 % are engineering graduates and 29 % are post graduates.
- There is significant relationship between employee satisfaction on the facilities and the positions level of employees.
- There is significant relationship between the number of employees in the organization and the number of floors in the building
- There is significant relationship between the types of company and the infrastructure facilities in the company
- Fried mans rank test has been conducted to test the employees satisfaction on the provision available to disabled persons The test results exhibits that the first two ranks were occupied by easy access to main entrance through ramp and ramp is provided with handrail, since their mean ranks are 4.80 and 4.59.

### **SUGGESTIONS**

- 1. Establish an IT research institute to do research on the domestic IT enablement and lead innovation in the It sector to address the needs of the state.
- 2. Improve infrastructure near technopark like working women's hostel, housing, children, parks, parking spaces, cultural centre, Food courts etc.
- 3. To increase the capacity of sewage treatment plant and to install the same for phase II phase III
- 4. The existing IT policy has to be amendment focusing the area for incentives to Small and Medium Enterprises
- 5. Better travel infrastructure in and around techno park is required

### CONCLUSION

The progress of companies in Technopark depends on the development of physical, basic and social infrastructure like land, water supply system, built-up space, e-waste management, fire fighting system, connectivity, campus security, power distribution system, incubation center, health care and single window clearance. Obviously if proper attention is not paid to the development of infrastructure, it is likely to act as a severe constraint on the efficiency of the organisation and also in the economic development processes in the country.

### **REFERENCES**

- 1. Bhagat L.N. "Inter-Regional Disparities in Agriculture Infrastructure", Indian Journal of Agricultural Economics, Vol. 38, No. 1, 1983.
- 2. Bikram Shahi, Impact of Infrastructure Development on Society: A casestudy of Narayan Municipality ward No:1,Daikkh; Tribhuvan University, Nepal,2012
- 3. Fulmer, Jeffrey (2009), What in the world is infrastructure? PEI Infrastructure Investor(july/August)30-32
- 4. http://www.infoparkkochi.com
- 5. http://www.mckinsey.org
- 6. http://www.nasscom.org,
- 7. http://www.technopark.org
- 8. Infrastructure, Define Infrastructure at Dictionary.com
- 9. Online Etymology Dictionary. Douglas Harper, Historian. http://dictionaryreference.com/browse/infrastructure (accessed: April 24,2008)
- 10. Sullivan Arthur, Steven M. Sheffrin (2003). Economics: Principles in Action, Upper saddle River, New Jersey 07458: Pearson Prentice Hall, P.474 ISBN 0-13-663085

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